

AMENDMENTS IN THE SPECIFICATION:

Please amend the abstract of the disclosure as follows:

~~In a coefficient update method for a time domain equalizer of a DMT system, an optimum coefficient is obtained even during a data period. The processing volume for the coefficient update is also decreased. A~~ In a discrete multitone modulation (DMT system), a coefficient of a time domain equalizer (TEQ) the TEQ 32 is updated by an the output of the time domain equalizer (TEQ 32) of the DMT system. Because of this, the transient of the sync signal where a cyclic prefix is added during the data period can be removed, so the coefficient of the TEQ can be accurately updated even if sync symbols are used. ~~Therefore~~ As a result, the coefficient of the TEQ is updated ~~even~~ during data communication as well as during training communication, so the coefficient of the TEQ 32 can be continually updated according to the change in the channel characteristics ~~even for a channel where the characteristics change. Since the output of the FFT (36) such that processing volumes for a Fast Fourier Transform (FFT) unit on the main path at a subsequent stage of the TEQ (32) is used, the processing volume of the FFT for the coefficient correction processing can be decreased.~~